

Claims

1. An interference suppressor (10) for suppressing high-frequency
5 interference emissions of a direct current motor (26) that is drivable in a plurality of stages and/or directions, having a plurality of capacitors (16) located on a first side (12) of a printed circuit board (14) and having a plurality of first conductor tracks (18), located on the first side (12) of the printed circuit board (14), for putting the various capacitors (16) into contact with a ground terminal (20), and having a first
10 terminal (22) and at least one further terminal (24) for the individual stages of the direct current motor (26), the first terminal (22) and the at least one further terminal (24) being put into contact with a first connection line (48) for the first stage and at least one further connection line (50) for the at least one further stage of the direct current motor (26), characterized in that a ground face (34) is
15 located on a further side (32), diametrically opposite the first side (12), of the printed circuit board (14), and the first connection line (48) and the at least one further connection line (50) are fed through in insulated fashion relative to the ground face (34).
- 20 2. The interference suppressor (10) as defined by claim 1, characterized in that at least one varistor (38) and/or at least one Cx capacitor (40) is located on the first side (12) of the printed circuit board (14) and is connected to the first terminal (22) and the at least one further terminal (24), respectively, via further conductor tracks (42).
- 25 3. The interference suppressor (10) as defined by one of the foregoing claims, characterized in that the conductor tracks (18, 42) are located on the first side (12) of the printed circuit board (14) symmetrically about an axis (47) of the printed circuit board (14).

4. The interference suppressor (10) as defined by claim 1, characterized in that the ground face (34) is electrically connected via through-plated holes (30) to the ground terminals (20) of the capacitors (16) on the first side (12) of the printed circuit board (14).

5. The interference suppressor (10) as defined by one of the foregoing claims, characterized in that the capacitors (16) are embodied as SMD ceramic capacitors (28).

6. The interference suppressor (10) as defined by claim 4, characterized in that the through-plated holes (30) are embodied as via-holes (36).

7. The interference suppressor (10) as defined by claim 1, characterized by a shielding housing (54), surrounding the interference suppressor (10), which housing is connected electrically conductively to the ground face (34).

8. The interference suppressor (10) as defined by claim 7, characterized in that the first connection line (48) and the at least one further connection line (50) are fed through the shielding housing (54).

9. The interference suppressor (10) as defined by claim 7, characterized in that the shielding housing (54) is connected electrically conductively to a motor housing (58) of the direct current motor (26).

10. The interference suppressor (10) as defined by claim 9, characterized in that the shielding housing (54) and the motor housing (58) of the direct current motor (26) are connected to one another via a plurality of contact points (56).

11. The interference suppressor (10) as defined by one of the foregoing claims 1 through 3, characterized in that at defined points (44), the conductor tracks (18, 42) have tapered portions (46) for a short-circuit guard.

5 12. The interference suppressor (10) as defined by one of the foregoing claims, characterized in that the capacitors (16) and/or the at least one varistor (38) and/or the at least one Cx capacitor (40) is contacted by way of radial or axial connection wires extended to the outside.